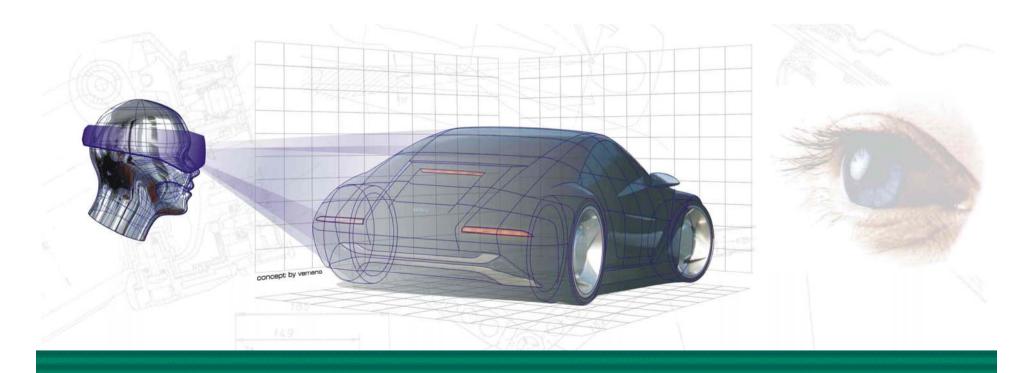


The Eastern German Automotive Cluster - a Japanese Supplier Perspective



Gert Herrmann





Part 1: Automotive Clusters

Part 2: Trends in the Automotive Industry

Part 3: Eastern German Automotive Cluster

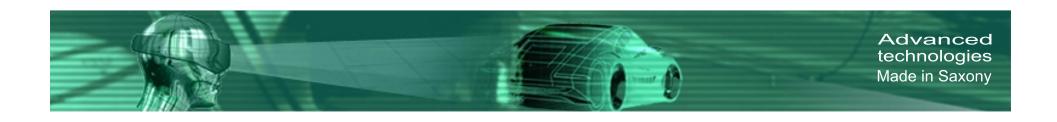
Part 4: Video Session "Chemnitz"





Part 1:

Automotive Clusters







Characteristics of an Automotive Cluster

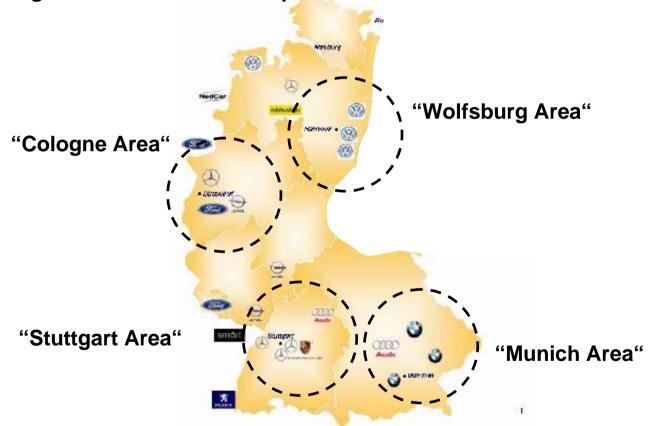
An Automotive Cluster represents a high concentration of OEMs and suppliers who have set up a network of co-operation within a relatively small area.





Traditional Automotive Clusters in Western Germany

Four big clusters close to headquarter of OEMs

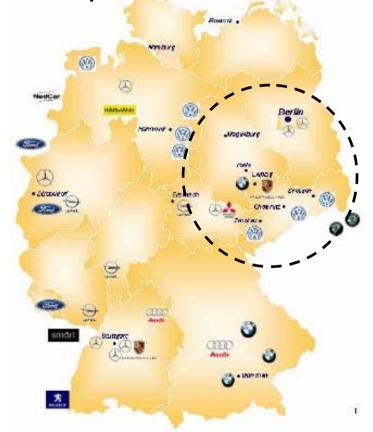






New Automotive clusters in Eastern Germany

New clusters close to OEM's production sites









The Automotive Industry in Eastern Germany before 1990







The Automotive Industry in Eastern Germany in 2004

Strong development within 14 years







The Automotive Industry in Eastern Germany in 2004

The Automotive Cluster in Saxony

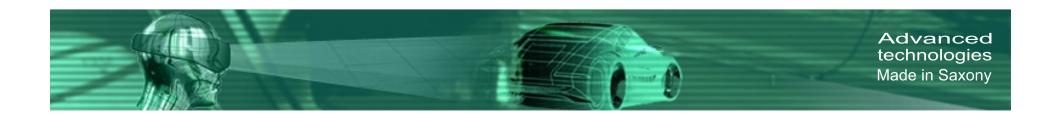






Part 2:

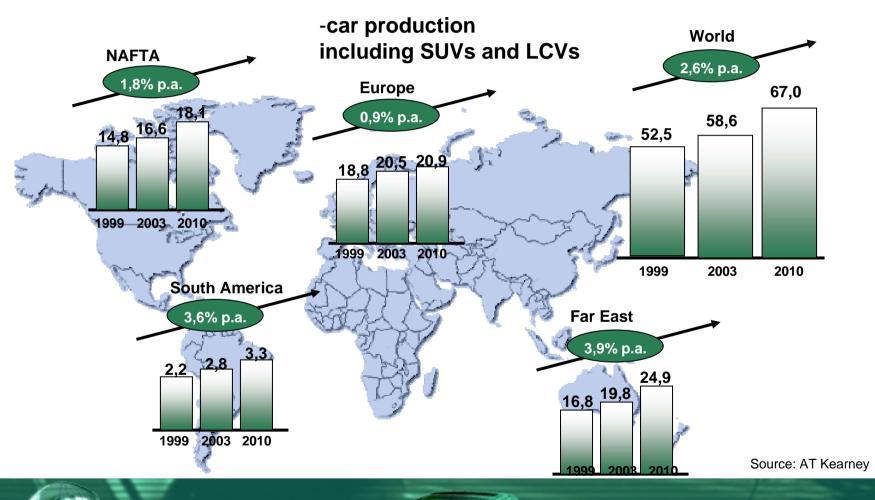
Trends in the Automotive industry







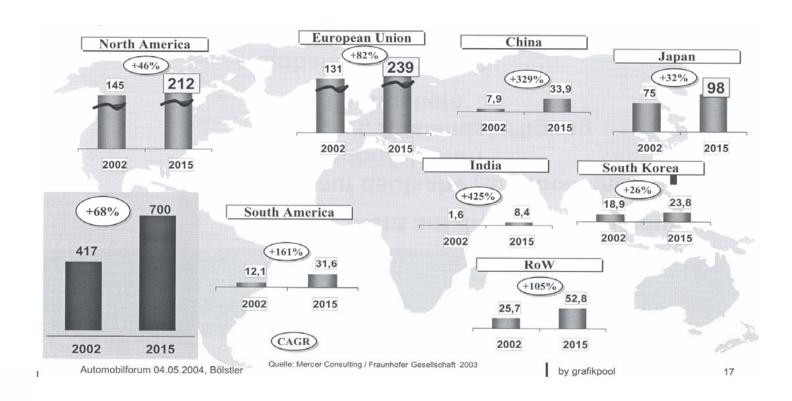
Vision of world-wide growth in the Automotive industry





Sales growth forecast of the supplier industry

Strong growth in emerging markets and major markets Europe, USA and Japan







One trend is to relocate production to "low-wage countries"

A recent study from Ernst & Young states

Soon, one in two western European suppliers will be operating in eastern Europe or China. Just under 40 percent are already running their own production plants there and 16 percent are planning to relocate.

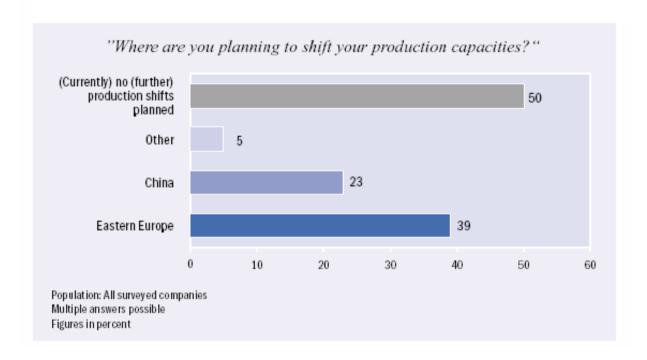
Source: E & Y





One trend is to remain in the home country

50 % of German suppliers do not plan to shift production to "low-wage countries"



Source: E & Y





Reasons to keep production in Germany

Other factors of attractiveness besides costs

- > Employee qualifications
- > Flexibility of labor force
- > Working attitudes
- > Employee motivation
- > Proximity to attractive sales markets
- Proximity to manufacturers (OEMs)
- > Regional infrastructure
- > Political framework

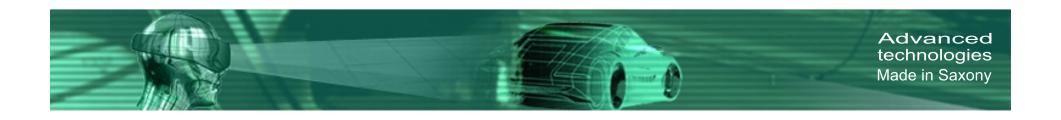
Source: E & Y





Part 3:

Eastern German Automotive Clusters - Example Saxony







The Automotive Cluster Saxony

Plenty of activities







Growth driven by highly sophisticated products

















Growth driven by highly sophisticated production processes

Laser processing machine



Assembly plant for precision components



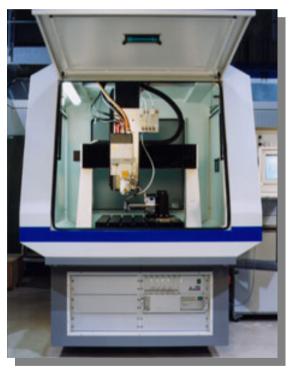
High-power diode laser

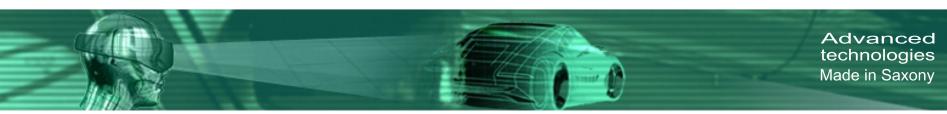


Filling system gas generator



Machine systems for laser hardening









Success factor industrial structure

Numerous existing co-operations in the automotive sector with companies from

- **☑** motor industry
- **☑** production engineering
- **☑** metal processing industry
- **☑** electrical industry
- **☑** textile industry
- **☑** plastics industry







Success factor employee qualification and motivation

- ✓ over 40,000 high qualified and motivated specialists and automotive sector executives in the area, thereof 13% with a matriculation standard and 60% specialists, mostly in the metal processing sector
- ✓ more than 10,000 high potentials graduating from 4 regional universities or colleges each year
- ✓ standard working time is 40 hours per week in full shifts
- ✓ low downtimes as well as self-certifications below German average





Success factor employee education

☑ Four universities and colleges with more than 25,000 students in the area:

University of Technology Chemnitz with nearly 20 affiliated institutes,

University of Applied Sciences Mittweida,

University of Technology Mining College Freiberg,

University of Applied Sciences Zwickau

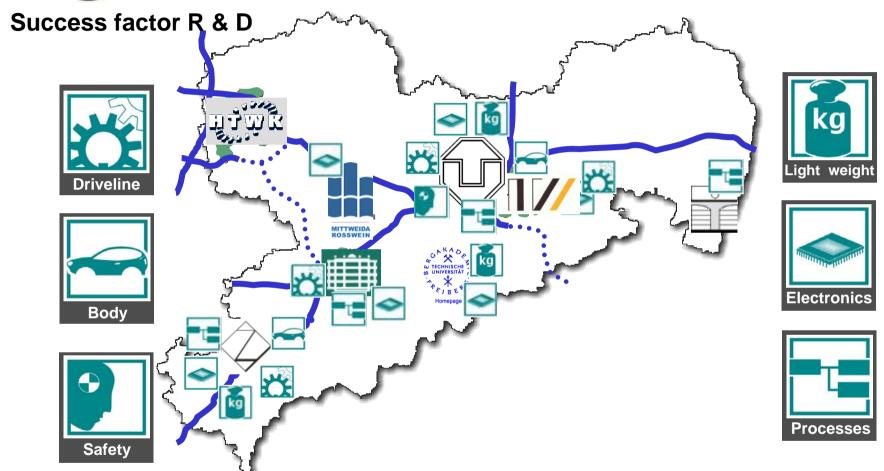


- ☑ Fraunhofer Institute for Machine Tools and Forming Technology
- **☑** many research institutes with focus on automotive sector
- ☑ Technology Center Chemnitz largest and most successful technology center in East Germany







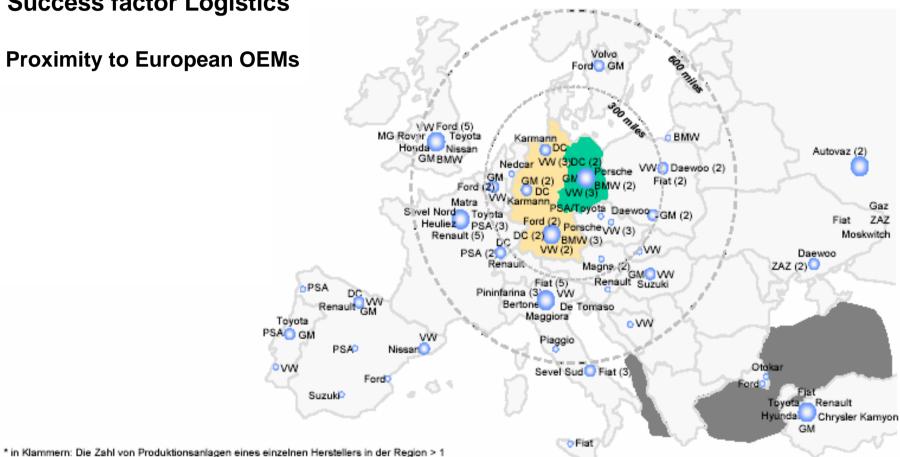






Success factor Logistics

Proximity to European OEMs



Quelle: Automotive News Europe; AMZ Sachsen - Verbundinitiative "AutoMobilZulieferer Sachsen"







Success factor Logistics



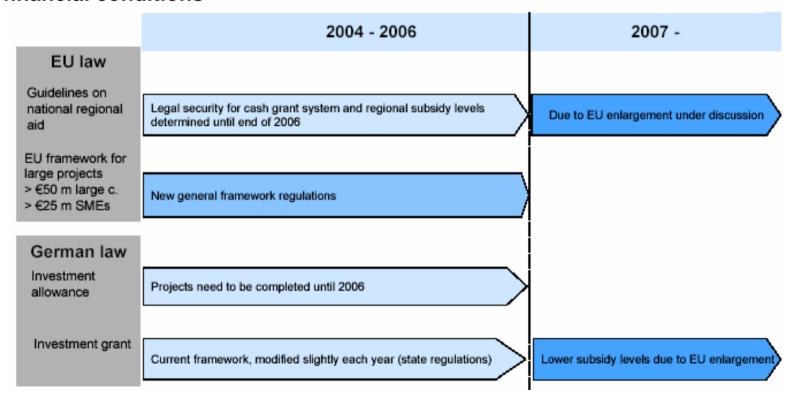






Political framework

Good financial conditions

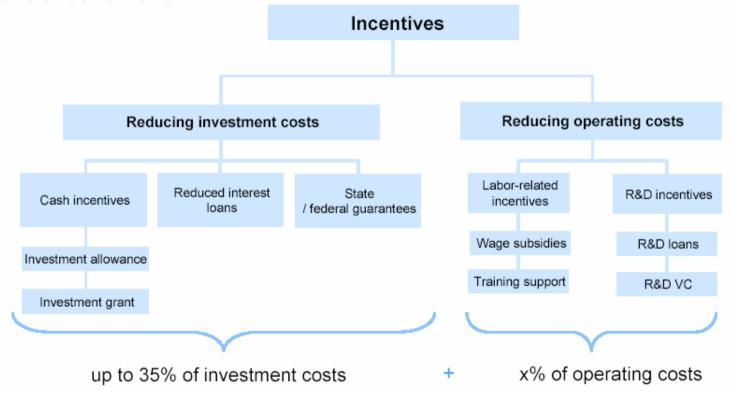






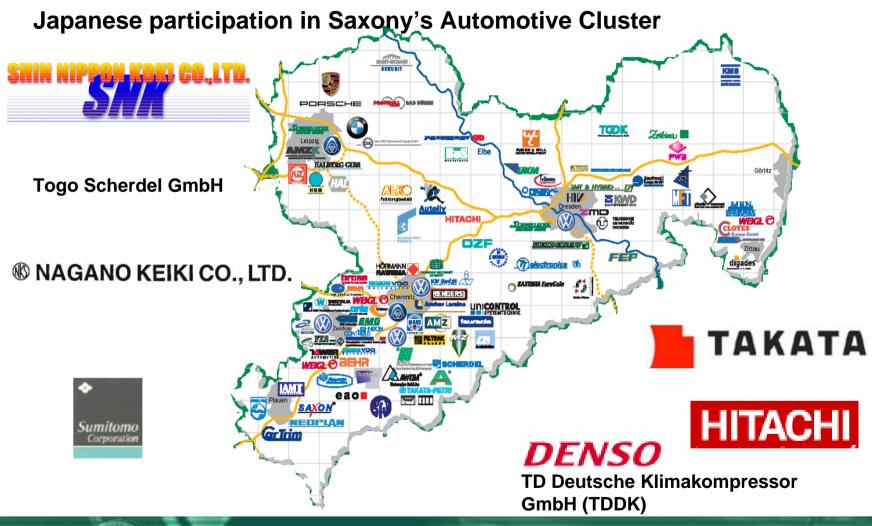
Political framework

Good financial conditions









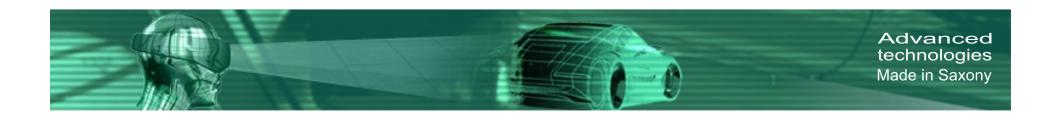




Part 4:

Video Session

"Chemnitz"









International Symposium

国 際 シンポジウム

Recent Developments in the Automotive Supplier Industry in Japan and the EU 日本とEUにおける自動車 サプライヤー産業の発展